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PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN THE APPLICATION OF:

**NEIL ANDRE ROBERTS** 

CASE NO.: VK0001USCIP

APPLICATION NO.: 10/632817

CONFIRMATION NO.: 4605

**GROUP ART UNIT: 1751** 

EXAMINER: John R. Hardee

FILED: August 04, 2003

FOR: REFRIGERANT COMPOSITIONS

## **INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In compliance with 37 C.F.R. §§1.97 and 1.98, Applicants bring to the attention of the U.S. Patent and Trademark Office the information listed on the enclosed PTO/SB/08A and/or PTO/SB/08B forms. A copy of the information, if required, is also enclosed. Consideration of the information is requested under 37 C.F.R. § 1.56 and this information is submitted in accord with the provisions of §1.97(b): within three months of filing the national application under 37 C.F.R. §1.53(d), or entry into the national stage under 37 C.F.R. §1.491, or before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action on the merits after filing a Request for Continued Examination under 37 C.F.R. §1.114.

If this Information Disclosure Statement is filed under §1.97(b) but the mailing date hereof is after the mailing of a first Office Action on the merits, the PTO is authorized to charge the fee set forth in 37 C.F.R. §1.17(p) to Deposit Account No. **04-1928** (E. I. du Pont de Nemours and Company) in order to complete the requirements for consideration of this Information Disclosure Statement.

Respectfully submitted,

MARY ANN CAPRIA
Attorney for Applicants
Registration No.: 32,659
Telephone: (302) 992-3749 Facsimile: (302) 892-7949

Dated: April 24, 2006

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|------------------------|--------------------|---|
| Application Number     | 10/632817          |   |
| Filing Date            | August 04, 2003    |   |
| First Named Inventor   | NEIL ANDRE ROBERTS |   |
| Group Art Unit         | 1751               |   |
| Examiner Name          | John R. Hardee     |   |
| Attorney Docket Number | VK0001USCIP        |   |

|                        | U.S. PATENT DOCUMENTS |      |  |                                |  |   |
|------------------------|-----------------------|------|--|--------------------------------|--|---|
| Examiner<br>Initials * | Cite<br>No.1          |      | cument Number<br>- Kind Code <sup>2</sup> (if known) | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|                        |                       | US - | 6,655,160 B2   | 12-02-2003                     | Roberts  |   |
|                        |                       | US - |  |                                |  |   |
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|-----------|------|--|------------------|-----------------------------|--|----|
| Examiner  | Cite | Foreign Patent Document  | Publication Date | Name of Patentee or         | Pages, Columns, Lines, Where Relevant Passages or Relevant |    |
| Initials* |      | CountryCode <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known) | 7 I              | Applicant of Cited Document | Figures Appear   | Тв |
|           |      | WO 97 34961  | 09-25-1997       | Goble                       |  |    |
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| _                      | Complete if Known  |
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| Examiner Name          | John R. Hardee     |
| Attorney Docket Number | VK0001USCIP        |

| Examiner<br>Initials * | Cite<br>No.1 | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T² |
|------------------------|--------------|---|----|
|                        |              | BUTLER D., "R22 drip-in a success at BRE", Refrigeration and Air Conditioning, pp. 49-50 (1994)   |    |
|                        |              | Fluorocarbon azeotropes, Research Disclosure 16265 (1977)   |    |
|                        |              | JP 01 139678 (English Translation of the Abstract)  |    |
|                        |              | PEARSON SF, "Uses of hydrocarbon refrigerants", I.I.FI.I.R. Commissions B1, B2, E1 and E2, pp. 439-46 (1996)  |    |
|                        |              | E-mail reply from Herrick Conference to Felix Flohr dated May 27, 2003  |    |
|                        |              | Internet citation, "Conference Organizing Committee", http://www.ecn.purdue,edu/Herrick/Events/organize-frame.htm   |    |
|                        |              | Internet citation, "Registration Information", http://www.ecn.purdue.edu/Herrick/Events/Registration.htm  |    |
|                        |              | ASHRAE Standard 34-2001, "Contents", pp.7 and 13  |    |
|                        |              | Sworn Statement by Christoph Meurer   |    |
|                        |              | BIRETT K, "Information sheets on hazardous substances" (1996)   |    |
|                        |              | SOFFIENTINI ET AL., "Evaluation of alternative refrigerants when retrofitting R-22 refrigeration systems", Centro Studio Galileo Industria & Formazione Eleventh European Conference, Milan, Italy (2005)   |    |
|                        |              |   |    |
| Examiner Signature     |              | Date<br>Considered  |    |

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Under the Paperwork News at 1571 (1997)

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On 3 200 (1997)

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|                                   | Group Art Unit         | 1751               |   |
| (Use as many sheets as necessary) | Examiner Name          | John R. Hardee     |   |
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| Examiner<br>Initials * | Cite<br>No.1 | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T² |
|                        | :            | JP 01 139675 (English Translation of the Abstract)  |    |
|                        |              | ROBERTS NA, "Determination of the performance, leak scenario, flammability and oil return characterictics of novel R22 replacement", Proceedings of the Seventh International Refrigeration Conference at Purdue University, West Lafayette, Indiana (1998)     |    |
|                        |              | MUSSO E ET AL., "Miscele temarie a base di HFC contenenti idrocarburi come sostituti "drop in" di R12 nella refrigerazione domestica", Conference on Conditioning, Heating, Refrigeration: Innovations and Trends, Milan, Italy (1997)                          |    |
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